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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/980,897	03/25/2002	Juhani Latvakoski	NOKIA.4008US	1451
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ROBERT M BAUER, ESQ. LACKENBACH SIEGEL, LLP 1 CHASE ROAD SCARSDALE, NY 10583			EXAMINER JUNG, MIN	
			ART UNIT 2616	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/980,897	Applicant(s) LATVAKOSKI, JUHANI	
	Examiner Min Jung	Art Unit 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 September 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 26,28-33,35-38 and 42-54 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 26,28-33,35-38 and 42-54 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 26, 28-33, 35-38, 43-48, 52, 51 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 26, line 1, it is not clear what kind of relationship does the recited "method" have with the "allocating" step; does the method comprise the step of allocating?

In claim 51, line 1, it is not clear what kind of relationship does the recited "network element" have with the "circuitry configured to allocate"; does the network element comprise the circuitry?

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 26, 28-33, 35-38, and 43-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wallentin et al., US Patent 6,347,091 (Wallentin).

Wallentin discloses a method and apparatus for dynamically adapting a connection state in a mobile communications system. Regarding the present invention, Wallentin teaches a method for allocating one of a plurality of communication resources of communication networks in which information is transferred between a first station and one or more second stations in the form of at least one packet, the method comprising the step of allocating one of the communication resources based on the size of the at least one packet to be transferred, wherein information relating to the size of the at least one packet to be transferred is provided to a network element performing the allocation step. See fig. 4 and 5, and col. 6, line 27 – col. 7, line 8, Fig. 7 and col. 7, line 63 – col. 8, line 36, and Fig. 10, and col. 11, lines 20-53. Specifically, Wallentin teaches, “An optimal channel type may be dynamically/adaptively determined and allocated based on a single, relatively simple parameter such as the amount of data currently stored in a connection queue, i.e., queue length....” (col. 6, lines 46-49). The amount of data in the connection queue reads on the size of the packet. The connection state selector CSS in the RNC would read on the network element performing the allocation step. Wallentin teaches signaling over the radio interface in order to make the connection state change. Wallentin, however, fails to specifically teach transferring the size information as a service primitive parameter. Service primitives are basic types of communication. Newton’s Telecom Dictionary (by Harry Newton, 1994) defines “primitives” as ‘Abstract representations of interactions across the service access points indicating information is passed between the service user and service provider. There are four types of primitives in the OSI Reference Model – request, indication, response

and confirm'. Although Wallentin does not specifically use the term "service primitive", it is clear that basic interactions are obviously there between two entities which communication includes the data size information. Wallentin apparently teaches transferring the information regarding the size of the data as a parameter at col. 11, lines 54-66. Wallentin teaches that a notification message is sent containing a current amount of data in an incoming packet queue. Therefore, Wallentin essentially teaches providing information relating to the size of the at least one packet to be transferred to a network element performing the allocating step, and information relating to the size of the at least one packet is transferred in a notification message including a current amount of data in an incoming packet queue. As stated earlier, a service primitive is an abstract representation of interactions across the service access points, and Wallentin teaches sending a notification message including the size information. Therefore, it would have been obvious for one of ordinary skill in the art at the time of the invention to implement the Wallentin's teaching by specifically employing the service primitive concept in the messaging between service access points to communicate the size of data to be transmitted as a service primitive parameter.

Further, regarding the limitation that information relating to the size of the at least one packet is transferred as an information element of a protocol data unit, it is a common knowledge that packet size information can be included as a part of PDU as is shown by May, Jr. in US patent 4,962,498. See col. 10, line 41 – col. 11, line 8. Note that Wallentin already teaches communicating the size information in the notification message. Therefore, it would have been obvious for one of ordinary skill in the art at the

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time of the invention to implement Wallentin by communicating the information regarding the amount of data to be transferred as a part of a PDU by putting the notification message in a PDU.

Further, Wallentin teaches that if the at least one packet to be transferred is less than a predetermined size, then a common communication channel is allocated for transfer, and if the at least one packet to be transferred is greater than a predetermined size, then a dedicated communication channel is allocated for the transfer (col. 2, line 54 – col. 3, line 10).

Further, Wallentin teaches that there may be two or more associated packets, and that CDMA system is used (col. 2, line 54 – col. 3, line 10, and col. 5, lines 19-25).

Wallentin further teaches different types of services being provided by the disclosed system, including voice services and packet data services including emails, file transfers, and information retrieval using Internet.

Allowable Subject Matter

5. Claim 42 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Response to Arguments

6. Applicant's arguments filed September 10, 2007 have been fully considered but they are not persuasive.

Applicant's attorney provides argument regarding the meaning of the terms "packet" and "size of packet" used in the specification. The intended meaning of the terms underlined in the response is acknowledged and accepted. Examiner however maintains the fact that these meanings are quite different from the widely accepted meaning of packet and packet size, and that the meanings here can encompass any data in any form (not necessarily in a packet form) at any level in the seven layer protocol stack, generated by users and/or applications.

Regarding the obviousness rejection, applicant's attorney points out at page 11 of the response that the claimed invention overcomes the buffer overflow problem in the Wallentin patent by determining allocation from the packet source directly. It is also pointed out that the claimed invention also has the advantage that it can be implemented with lower signaling overhead and less hardware time when compared with the method discussed in the Wallentin patent. These remarks are well noted. However, these points are not recited any of the claim limitations in any specific way.

Regarding the next point raised, Examiner disagrees with the applicant's attorney's characterization of examiner's rejection. Applicant's attorney stated that the obviousness rejection acknowledges that there is no suggestion in the Wallentin patent of information relating to the size of the at least one packet to be transferred provided to a network element performing the allocation, where the information relating to the size of the packet is transferred as a service primitive parameter. Unlike the attorney's interpretation of the rejection, Examiner simply stated that Wallentin fails to specifically teach transferring the size information as a service primitive, or as an information

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element of a protocol data unit. As clearly explained in the rejection above, Wallentin does teach the information relating to the size of data to be transferred being provided to a network element performing the allocation (notification message containing current amount of data in the incoming packet queue sent to the connection state selector 70, col. 11, lines 54-66). Further, as explained in the rejection above, there is nothing magical about “service primitive parameter” since it just means a parameter carried in a message (a request message for example). Examiner cited above a definition for the term “primitive”. Since Wallentin teaches sending a notification message including a size information, it would have been obvious for one of ordinary skill in the art at the time of the invention to implement the Wallentin’s teaching by specifically employing the service primitive concept in the messaging between service access points to communicate the size of data to be transmitted as a service primitive parameter. However, as to claim 42, this claim recites transferring the size information to be transferred both as a service primitive parameter and as an information element of a protocol data unit. This feature is not taught or suggested by Wallentin, and therefore claim 42 is considered allowable.

As an additional point, although queue length or amount of data in a queue is not the same as packet size in a conventional understanding of packets, the meaning of “packets” as disclosed in the present invention covers the concept of queue length because the meaning of “packet” as disclosed in the present specification includes user data documents such as “zip files”, “emails”, “digitized speech”, and “video” (page 1), and teaches that “the size of the packet used in the allocation is the size of the data file

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generated at the application level" (page 9). Therefore, since the queue length in Wallentin indicates the size of data that need to be transferred, and since Wallentin determines the communication resources (channel type) based on the queue length, Wallentin does allocate one of the communication resources based on the size of at least one packet to be transferred.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Min Jung whose telephone number is 571-272-3127.


The examiner can normally be reached on Monday through Friday 9:00 - 5:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Firmin Backer can be reached on 571-272-6703. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MJ
November 2, 2007


Min Jung
Primary Examiner